

REEL # 235

Kochelayer, V.S.

END

KOCHERLAYEV, V.S., master po lesonasashdeniyu.

~~_____~~
Courses for master tree planters. Avt.dor.18 no.5:3 of cover 8'55.
(Tree planting) (KIRA 9:1)

KOCHSELEV, A. F.

"Isomerisation des hydrocarbures polymethyleniques sous l'influence du chlorure d'aluminium. IF. Isomerisation du n.-butyl-cyclopentane". Touraya-L eliek, M. B.;
Kocheslev, A. F. (p. 2179)

SO: Journal of General Chemistry
(Zhurnal Obshchei Khimii) 1939, Volume 9, #23

KOCHERKOVA, A. E.

1
5
8

MT ✓ Thermal conductivity at basic refractivity. A. P. KOCHERKOVA AND Y. I. LONCHARENKO. *Otkrytiya*, 20 (1) 56-57 (1968). Determinations were made with a calorimeter in which the glass coil was modified to allow working within wide limits and to permit determination of λ of basic and other commercial refractories. In addition to λ , determinations were also made of the heat capacities and thermal expansion. Maximum temperature of the hot side was 1400°C. The relative error does not exceed 8.0% of the measurable value. B. Z. K.

①
PM

BARYKINA, Rimma Pavlovna; KOSTRIKOVA, Lidiya Nikolayevna;
~~KOCHETKAROVA, Irina Pavlovna~~; LOTOVA, Lyudmila Ivanovna;
FRANKOVSKIY, Daniil Aleksandrovich; CHISTYAKOVA, Ol'ga
Nikolayevna; SOKOLOVA, N.A., red.; SHVETSOV, S.V., tekhn.
red.

[Laboratory manual on plant anatomy] Praktikum po anatomii
rastenii. [By] R.P.Barykina i dr.[n.p.] *Rosvuzisdat*,
1963. 183 p. (MIRA 16:10)

(Botany--Anatomy)

SEMENOV, Ye.I.; KOCHENASOV, G.G.; BYKOVA, A.V.

Zirkelite and rosenbushchite from contact-metasedimentary rocks in
the Lovosero Tundras. Trudy IMORE no.15:106-109 '63.
(MIRA 16:11)

21392

S/120/61/000/002/002/042
E032/E114

26.23/2

AUTHORS: Khirnyy, Yu.M., and Kochemasova, L.M.

TITLE: An injector of negative hydrogen ions

PERIODICAL: Priory i tekhnika eksperimenta, 1961, No. 2, pp. 14-19

TEXT: The electrostatic generator has retained its importance in nuclear reactor studies since it can be used to produce accelerated particle beams with a very small energy spread. In order to double the energy of particles obtained from electrostatic generators one can use the L.W. Alvarez scheme (Ref.1) whereby negative hydrogen ions are first accelerated by the field between the "earth" and the positive electrode and then, having given up two electrons in a stripping target, they are converted into positive ions which are accelerated again by the field but in the opposite direction. The energy thus obtained corresponds to twice the applied potential. The two ion injectors described in the present paper are designed for this type of application. The stripping target employed by these authors was in the form of a long thin tube with a gas circulated through its middle part. In order to obtain good vacuum and avoid charge exchange on
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S/120/61/000/002/002/042
Z032/E114

An injector of negative hydrogen ions

residual gas atoms, the diameter in the tube had to be as small as possible. It was found that the most suitable electron-optical focussing scheme for the negative ions was a combination of a three-electrode lens with an immersion lens. The first of these lenses focusses the beam leaving the source in the immersion lens. The latter is used to match the beam energy to the accelerating voltage of the tube and to stabilize the position of the narrowest part of the beam in its object plane (C.H. Johnson, et al. Rev. Scient. Instrum., 1957, 28, 942. Ref.4). The three-electrode lens consists of electrodes of equal diameter ($D=30$ mm). The length of the middle electrode is 30 mm and the gap between the electrodes is 3 mm. The minimum focal length is about 50 mm. Fig.3 shows a schematic drawing of the H^- injector. In this figure, 1 is the source of the negative ions, 2 is the focussing system, 3 is the corrector which is used to adjust the position of the beam, 4 is an electron separator which consists of two permanent magnets and a moveable Faraday cup 5. The latter is used to measure the beam current. The electrodes 6 and

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S/120/61/000/CO2/002/042
EO32/E114

An injector of negative hydrogen ions .

9 are used to suppress secondary electron emission, 7 is a valve, 8 is a trap which removes CO₂ which flows in from the stripping target, 11 is a slit and 12 is a second Faraday cup. Fig.5 shows another negative ion injector in which the H₁⁻ and H₂⁻ particles are separated by a magnetic field. In Fig.5, 1 is the negative ion source, 2 is a single lens, 3 is the magnetic analyser, 4 is a 4 mm diaphragm, 5 is an immersion lens, 6 is a corrector, 7 is a Faraday cup, 8 is a valve and 9 is a trap. With this arrangement only two lenses are necessary as compared with four in the apparatus described by L.E. Collins and A.C. Riviere (Ref.9: Nucl. Instrum. and Meth., 1959, 4, 121). Moreover, the length of the focussing system of the injector up to the object plane of the tube is smaller by a factor of 20 as compared with the length reported in Ref.9. The beam diameter obtained in the object plane is smaller than in Ref.9 and is practically independent of the input energy. The negative hydrogen-ion injector described in this paper was designed for an electrostatic generator with a working energy of 2 x 1.5 Mev. ✓

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21392

S/120/61/000/002/002/042

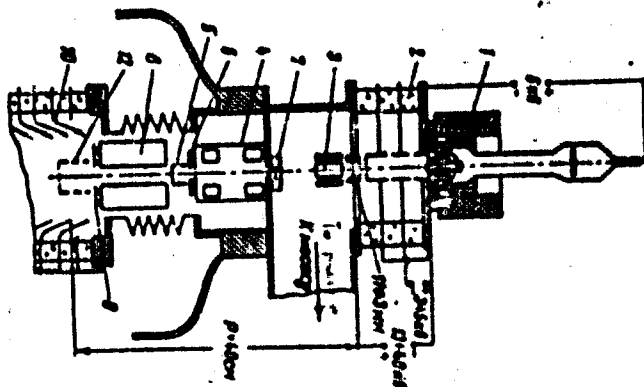
E032/E114

An injector of negative hydrogen...

There are 5 figures, 3 tables and 9 references: 3 Soviet and 6 non-Soviet.

Acknowledgements are expressed to A.V. Almazov for his interest in this work.

SUBMITTED: May 6 1960



Card 4/5

ACC NR: AP7001934

SOURCE CODE: UR/01.0/66/000/006/0032/0036

AUTHOR: Khirnyy, Yu. M.; Kochemasova, L. N.

ORG: none

TITLE: Universal injector of negatively charged ions of hydrogen isotopes for a charge exchange generator

SOURCE: Priory 1 tekhnika eksperimenta, no. 6, 1966, 32-36

TOPIC TAGS: ion source, ion beam, electrostatic generator, charge exchange

ABSTRACT:

A description of an injector is given in which the negatively charged ions are obtained through the charge exchange of the positively charged ions in a supersonic flow of mercury vapor. The injector, shown in Fig. 1, consists of: 1 - a high-frequency source of positively charged ions with a water-cooled gas discharge bulb; 2 - a single lens located 25 mm from the channel of the source probe; 3 - an immersion lens; 4 - a charge-exchange chamber; 5 - a nozzle which creates a supersonic jet from the mercury vapor used as the charge-exchange target; 6 - a trap with liquid nitrogen; 7 - a second single lens; 8 - a vacuum valve which separates the chamber of the deflecting magnet from the charge-exchange chamber; 9 - a deflecting magnet; 10 - plates for the electrostatic corrector; 11 - Faraday cylinder for controlling the beam;

Card 1/3

UDC: 537.534.2

ACC NR: AP7001934

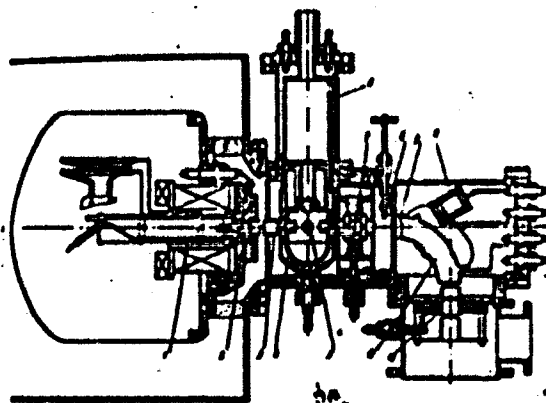


Fig. 1. Schematic of the turbine

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ACC NR: AP7001934

and 12 - a third single lens for focusing the beam at the exit from the injector. The injector was tested for 60 hr on a stand while operating on a D + He mixture. The D_1^- ion current was 14—17 μ a, and the consumption of mixture was 40—65 cm^3/hr . All of the units of the injector were in a normal state after the test and no mercury traces could be found in the chamber of the deflecting magnet or at the exit from the injector. The injector makes it possible to obtain bunches of H_1^- ions of 20—27 μ a, D_1^- ions of approximately 16 μ a, and T_1^- ions of 12—15 μ a. It is also simple to operate. 'Orig. art. has: 6 figures and 2 tables.

SUB CODE: 20/ SUBM DATE: 19Nov65/ ORIG REF: 004/ OTH REF: 002/
 ATD PRESS: 5112

Card 3/3

ACC NR: AP7001935

SOURCE CODE: UR/0120/66/000/006/0036/0039

AUTHOR: Almazov, A. V.; Khirnyy, Yu. M.; Kochemasova, L. N.

QRC: none

TITLE: Compact duoplasmatron source of negatively charged ions for a charge exchange generator

SOURCE: Pribery i tekhnika eksperimenta, no. 6, 1966, 36-39

TOPIC TAGS: ion source, ion beam, electrostatic generator, charge exchange

ABSTRACT:

The description is given of a duoplasmatron (see Fig. 1) with a constant magnet. At a 0.95-mm diameter of the anode aperture and a voltage of approximately 80 kv, the source current reached about 140 μ amp. The injector and source passed the stand test before being installed in the generator. At an aperture of 0.5 mm the source current was 40 μ amp. After 120 hr of constant operation the parameters of the source had not changed. Generally speaking, the source does not require the attention of an operation. Orig. art. has: 6 figures.

Cord 1/2

UDC: 537.534.2

ACC NR: AP7001935

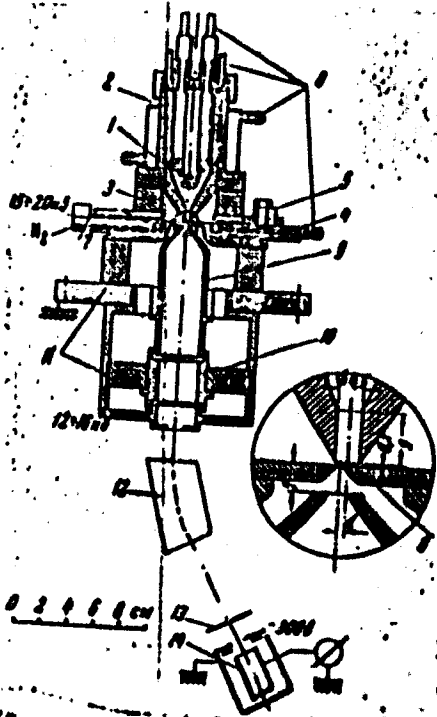


Fig. 1. Schematic diagram of duplasmatron

- 1 - Cathode; 2 - intermediate electrode (steel); 3 - magnet;
- 4 - anode (steel); 5 - cam;
- 6 - copper insertion; 7 - gap, measured with clearance gage;
- 8 - water cooling pipes;
- 9 - extraction electrode;
- 10 - single lens; 11 - insulators;
- 12 - deflecting magnet;
- 13 - slit; 14 - Faraday cylinder.

SUB CODE: 20/ SUBM DATE: 19Nov65/
 ORIG REF: 002/ OTH REF: 007/
 ATD PRESS: 5112

Cord 2/2

L 10105-63

ENT(1)/ENT(m)/BDS/ES(o)-2/ES(w)-2--

AFTIC/ASD/ESD-3/SSD--Pt-L/Pab-4--IJP(C)

ACCESSION NR: AP3002714

8/0120/63/000/003/0025/0029

AUTHOR: Khirnyy, Yu M.; Kochemasova, L. M.

TITLE: Study of a model of a charge-transfer electrostatic generator₂

SOURCE: Priory i tekhnika eksperimenta, no. 3, 1963, 25-29

TOPIC TAGS: charge transfer, electrostatic generator, ion accelerator

ABSTRACT: Construction and performance of a 3-Mev charge-transfer electrostatic generator are described. The design, shown in Fig. 1 of Enclosure, included accelerating porcelain-ring tubes, each 1.5-m long and separated by a section containing a stripping tube 340 mm long by 8 mm in diameter into which carbon dioxide was injected as the stripping agent. Hydrogen was used as the active source and was injected into the accelerating tube in neutral atomic and positive and negative ion form. The beam charging source was 500 W, alternating at 500 cps. The vacuum system consisted of two diffusion pumps with nitrogen traps. The method used for reducing the loading effect of secondary particles on the accelerating tubes was to add grids and to stop the beam down to a 3-mm diameter with a diaphragm, rather than to actually separate out the unwanted particles. Tests on the carbon dioxide injection rate showed that optimum positive ion

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ACCESSION NR: RP3002714

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formation occurred at an injection rate of 35 cm sup 3 per hr, or a chamber pressure of 6.5×10^{-5} mm Hg. However, it appeared that the accelerator operation is not very sensitive to this pressure and that one pump capable of 500 l/sec would be adequate. Results show that approximately 70% of the injected ion beam emerges in ion form and 10% as neutral hydrogen atoms. It is concluded that a construction of this type would also meet the demands of a 12-Mev accelerator, but that the question of separating out high-speed neutral atoms from the beam needs further investigation. "The authors thank A. V. Almazov, F. F. Myntsov, B. F. Ometov, V. A. Tabachkovskiy, I. G. Sugachov, and L. H. Budnikov for their help." Orig. art. has: 5 figures.

ASSOCIATION: none

SUBMITTED: 08May62 DATE ACQ: 12Jul63

ENCL: 01

SUB CODE: 00

NO REF SOV: 003

OTHER: 000

Card 2/3

KOCHENASOVA, N.G.

Comparative study of the effect of aminazine, amobarbital, and
chloralhydrate on temperature variations of the parotid gland.
Fisiol. zhur. [Ukr.] 6 no.3:349-357 My-Je '60. (MIRA 13:7)

1. Kiyevskiy meditsinskiy institut im. akad. A.A. Bogomol'tsa, kafedra
normal'noy fiziologii.
(CHLORPROMAZINE) (AMOBARBITAL)
(CHLORAL) (PAROTID GLANDS)

GUREVICH, M.I.; KVITNITSKIY, N.Ye.; KOCHENASOVA, N.G.; POZHNIKOV, M.N.;
LEVCHENKO, M.N.

Experimental study of the pathogenesis of myocardial infarction.
Vrach.delo no.11:20-24 N '62. (MIRA 16:2)

1. Laboratoriya fiziologii krovoobrascheniya (rukovoditel' -
doktor med.nauk M.I. Gurevich) Instituta fiziologii imeni A.A.
Bogomol'tsa AN UkrSSR.
(HEART—INFARCTION) (BLOOD—CIRCULATION, DISORDERS OF)

MIKHNEV, A.L.; KHOMAZIUK, A.I.; KOCHENASOVA, N.G.; KUZNETSOV, N.P.;
SMIRNOVA, N.S.; NESHCHERET, A.P.

Disorders in circulatory regulation in experimental
atherosclerosis in dogs. Trudy Inst. klin. i eksper. kar .
AN Gruz. SSR 8:181 186 '63. (MIRA 17:7)

1. Ukrainskiy institut klinicheskoy meditsiny imeni akademika
N.D.Strazhesko, Kiyev.

KOCHEMASOVA, N.G. [Kochemasova, N.H.]; YUREMENKO, M.S.

Determination of the extracellular space in various tissues by the
distribution volume of inulin. Fiziol. zhur. [Ukr.] 11 no.1:129-131
Ja-F '65. (MIRA 18:7)

1. Institut fiziclegii im. Bogomol'tsa AN UkrSSR, Kyev.

DYKHNO, M.M.; KOCHEMASOVA, Z.N.; DEROZHKOVA, I.R.

Study of the sensitivity of mycobacteria to antibiotics and
chemotherapeutic preparations. Antibiotiki 8 no.7:597-601
Jl'63 (MIRA 17:3)

1. Kafedra mikrobiologii (zav. - prof. M.N.Lebedeva) i Moskov-
skogo meditsinskogo instituta imeni Sechenova i mikrobiologi-
cheskaya laboratoriya (zav. - prof. A.I.Kagramanov) Instituta
tuberkuleza Ministerstva zdavcokhraneniya SSSR.

L 12813-66 EWT(1)/EWA(j)/T/EWA(b)-2 JK

ACC NR: AP5028183

SOURCE CODE: UR/0248/65/000/008/0039/0046 34

AUTHOR: Kochamasova, Z. N.; Dykhno, M. M.; Prozorovskiy, S. V.; Kassirskaya, N. G.;
Burn.strovich, S. F.; Savenkova, V. T.; Shchegolev, A. G.; Starchinova, V. S.

ORG: I Moscow Medical Institute im. I. M. Sechenova (I Moskovskiy meditsinskiy in-
stitut); Institute of Epidemiology and Microbiology im. N. I. Gamalei, AMN SSSR
(Institut epidemiologii i mikrobiologii AMN SSSR); II Moscow Medical Institute im.
N. I. Pirogova (II Moskovskiy meditsinskiy institut)

TITLE: L-forms of some types of pathogenic bacteria

SOURCE: AMN SSSR. Vestnik, no. 8, 1965, 39-46

TOPIC TAGS: infective disease, bacteriology, microbiology

ABSTRACT: I. L-forms of mycobacteria. In recent years atypical forms of mycobac-
teria have frequently been isolated from tubercular patients. These differ in many
significant ways from normal mycobacteria, yet are similar enough to be considered
as merely atypical strains. One explanation for this transformation is that the
atypical microbes arise from L-forms, which are themselves formed in response to the

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UDC: 576.852.211.095.5

L 12813-66

ACC NR: AP5028183

2

chemicals used in the treatment of tuberculosis. Several examples of just such transformations are noted in the literature. The purpose of the present study was to establish the conditions for L-transformation, to study the biological properties of the L-forms and their possible reversal to the bacterial form. One typical and one atypical strain were studied using several concentrations of dihydrostreptomycin, penicillin, or both as additives to the culture media. Cultures without antibiotics served as controls. The results (based on examination of live material and on differential staining) showed that L-forms are produced in response to both antibiotics, but the optimum conditions for transformation are when both antibiotics are present together. II. *L-forms of the family Corynebacteriaceae*. A study of the properties of the L-form of *Corynebacteriaceae* were undertaken with the hope of shedding some light on the connection of these bacteria with mycoplasma. Both toxigenic and non-toxigenic cultures of diphtheria and diptheroid organisms were used. It was found that L-form colonies were formed only on media containing 3% liver agar with 20% normal horse serum and penicillin. A detailed morphological description of the L-colonies is given. It is noted that subculturing resulted in almost total disappearance of normal rod-shaped bacteria which were found initially with some frequency. Certain cultures were found to revert to the rod-shaped *diphtheria organisms* without prior removal to a penicillin-free medium. The process of transformation

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ACC NR: AP5028183

into atypical L-colonies is lengthy and requires from 2 weeks to 2-4 months. Other experiments showed that not all members of a given bacterial population are equally susceptible to transformation by penicillin in that only 5-7 strains of a 30-culture sample underwent transformation. Studies of the biochemical and cytopathogenic properties of the L-forms showed no consistent variations from those of the parent cultures. III. *L-forms of bacteria isolated from blood cultures of typhoid patients and carriers.* It has been established that L-forms can be isolated from a variety of bacterial infections; however, there is insufficient evidence on the formation of L-forms in active typhoid cases or carriers, although such transformations have been observed in this organism under laboratory conditions. To resolve this question defibrinated blood and bile of typhoid patients and carriers were cultured and examined. Of the 17 cases examined one patient and two carriers showed L-form growth in their blood cultures, while one patient had a mixture of L-forms and bacterial forms. Of particular interest was one patient whose blood originally yielded only typical *S. typhi*, but after intensive treatment with antibiotics granular elements of L-forms were isolated. This study showed that L-forms can indeed be formed in the body so now it remains to be determined what role they play in the development of the carrier condition. Orig. art. has: 4 figures.

SUB CODE: 06/ SUBM DATE: 01Jun65/ ORIG REF: 002/ OTH REF: 002
jw

Card 3/3

KOCHEMASOVA, Z. N.

"Material for the study of Variability of Microbes of the Intestinal Group. IV. Nature of Antagonism of Typhoid-Paratyphoid Bacteria," Zhur. Mikrobiol., Epidemiol. i Immunobiol., No.8, p. 61, 1947

KOCHUMAZOV, M.I.; PIOTRASHKO, Yu.M.

Principal tasks of the public health service in Kuybyshev Province,
1959-1965. Zdrav.Mos.Feder. 3 no.1:16-19 Ja '59. (MIRA 12:2)

1. Iz Kuybyshevskogo oblastnogo otdela zdavookhraneniya.
(KUYBYSHV PROVINCE--PUBLIC HEALTH)

KOCHETAZOV, M.I.; POPOV, I.F.

Some results of the reorganization of the district level of the rural public health system in Kuyb shev Province. Zdrav. Ros. Feder. 4 no. 10:24-32 0 '60. (MIRA 13:10)

1. Is Mytyshevskogo oblastnogo otдела zdavookhraneniya.
(KUYB SHEV PROVINCE--PUBLIC HEALTH)

ARTEMOV, P. I.; KOCHETAZOV, M. I.; PIOTRASHKO, Yu. M. (Kuybyshev)

Change in the standards for dispensary and polyclinical care and
for the number of patients at a territorial medical center.
Zdrav. Ros. Feder. 6 no.6:8-13 Jo '62. (MIRA 15:7)

(HOSPITALS—OUTPATIENT SERVICES)
(MEDICAL CARE)

KOCHEMIDOV, At., Inzh.; ZOGRADOV, Iv.

Metal cutting with aerosol cooling. Mashinostroeni 19 no. 9: 32-35
S '64.

1. Central Scientific Research Institute of Technology and Machinery.

KOCHEMIROVSKIY, A.S.; REZNIKOVA, I.I.

Effect of the solvent on the fluorescence yield. Opt, 1 spektr, 8
no.3:399-401 Mr '60. (MIRA 14:5)
(Flourescence)

8/051/60/008/03/027/038

R201/R191

AUTHORS: Zhmyreva, I.A., Zelinskiy, V.V., Kolobkov, V.P.,
Kochemirovskiy, A.S., and Reznikova, I.I.

TITLE: On the Problem of the Effect of Solvents on the Electronic Spectra of Organic Molecules

PERIODICAL: Optika i spektroskopiya, 1960, Vol 8, Nr 3,
pp 412-414 (USSR)

ABSTRACT: Bakhshiyev (Refs 7, 8) derived relationships between the effect of solvents on the electronic spectra of organic compounds and the refractive indices and dielectric constants of the solvents. According to Bakhshiyev the experimental results fit excellently the formulae derived by him. Unfortunately if one substitutes into Bakhshiyev's formulae the values of λ and $\Delta\nu_{\lambda}$ for a wider range of solvents than those investigated by him, the experimental and theoretical dependences no longer agree; such disagreement can be seen clearly in Fig 1 which shows the dependence of $\Delta\nu_{\lambda}$ on λ for 4-aminophthalimide. Here $\Delta\nu_{\lambda}$ is the frequency shift due to a solvent and

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1/2

8/051/60/008/03/027/038

R201/R191

On the Problem of the Effect of Solvents on the Electronic Spectra of Organic Molecules

$$\lambda = \frac{2\varepsilon - 1}{2\varepsilon + 2} + p \frac{2n^2 - 1}{2n^2 + 2}$$

where ε is the dielectric constant and n is the refractive index of the solvent. Experimental data also disagree with a theoretically predicted inverse proportionality between the effect of solvents on the spectra and the molecular radii of the solvents (Fig 2). The authors follow earlier workers (Refs 9-13) and suggest that it is wrong in principle to attempt description of the effect of solvents on the spectra using macro-properties of these solvents, since such effect is primarily due to short-range intermolecular interactions governed by micro-properties of the solvents. A semblance of the relationship between the shift in the electronic frequencies and the dielectric constant is due to the fact that the dielectric constant is governed by the micro-properties of the solvents. There are 2 figures and 13 references, of which 6 are Soviet, 1 English, 2 Japanese and 4 German.

Card
2/2

SUBMITTED: August 12, 1959

S/051/60/009/004/031/034

E201/E191

AUTHORS: Viktorova, Ye.N., Kochemirovskiy, A.S.,
Krasnitskaya, N.D., and Reznikova, I.I.

TITLE: New Examples of Pronounced Dependence of the
Fluorescence Yield on Position in the Luminescence
Spectrum 21

PERIODICAL: Optika i spektroskopiya, 1960, Vol 9, No 4, pp 544-546

TEXT: Zelinskiy et al. (Ref 1) showed that in five
phthalimide derivatives there was a regular relationship between
the absolute quantum yield of fluorescence (q) at 20 °C in various
solvents and the frequency of the fluorescence spectrum maximum
(ν). The present paper reports a similar dependence of q on ν
in dimethylnaphtharhodine (dimetilnafteyrodin) (I),
2-aminoacridine (II) and cyclohexylaminomaleinimide (III) at 20 °C
(a figure on p 545). The fluorescence yields were measured
using a technique described earlier (Ref 4). The values of ν
(in 10^3 cm^{-1}) represent solutions in various solvents, such as
ethyl alcohol, cyclohexanol, cyclohexanone, and so on. For each
compound (I, II and III) $q = f(\nu)$ was in the form of \wedge ,
Card 1/2

8/051/60/009/004/031/034
E201/E191

New Examples of Pronounced Dependence of the Fluorescence Yield
on Position in the Luminescence Spectrum

suggesting two different processes of de-activation in the two
groups of solvents represented by the two branches of \wedge .
The fluorescence yield is denoted by q_{λ} and the fluorescence
maximum by λ_{\max} in the figure on p 545; numbers in the figure
(1-20) represent various solvents. Acknowledgement is made to
V.V. Zelinskiy who directed this work. There are 1 Figure and 7 references: 6 Soviet and 1 English.

SUBMITTED: May 20, 1960

Card 2/2

ZHMYREVA, N.A.; ZELINSKIY, V.V.; KOLOBKOV, V.P.; KOCHENKOVSKIY, A.S.;
REZNIKOVA, I.I.

Current status of the problem of the effect of the solvent
on the spectra of complex organic molecules. Izv.AN SSSR.Ser.
fiz. 24 no.5:596-600 M '60. (MIRA 13:5)
(Spectrum, Molecular)

ZHEMYREVA, I.A.; KOCHEMIROVSKIY, A.S.

Fluorescence of organic compounds in the adsorbed state.
Zhur. fiz. khim. 35 no.5:1163-1165 My '61. (MIRA 16:7)

(Organic compounds—Spectra) (Adsorption)

S/054/65/004/001/006/022
B102/B165

AUTHORS: Zhiglinskiy, A. G., Kochemirovskiy, A. S.

TITLE: Determination of isotopic composition from the emission spectrum of molecules

PERIODICAL: Leningrad. Universitet. Vestnik. Seriya fiziki i khimii, no. 1, 1963, 47-54

TEXT: Accuracy and reproducibility of isotope analyses with the help of atomic spectra, rotational or vibrational spectra of molecules depend on the relation between concentration ratio and intensity ratio. In the ideal case, $C_1/C_2 = I_1/I_2$. Numerous possible causes for deviation from the ideal relation are discussed (isotope separation, differences in the degree of molecular dissociation, self-absorption, background etc.). In the case of atomic spectra the high homogeneity of the spectral lines is the main cause of the deviation. For molecular spectra it is less high. Here the physical principles of an analysis according to the band edges of the electron vibrational spectra of biatomic molecules and according to the lines of the rotational spectra are discussed with special consideration

Card 1/2

ZHIOLINSKIY, A.G.; KOCHENIROVSKIY, A.S.

Spectrum analysis of ~~iron~~ iron isotopes. Vest. LGU. 18 no.16:
62-68 '63. (MIRA 16:11)

ACC NR: AIG005179

SOURCE CODE: UB/003/65/000/009/A021/A021

SOURCE: Ref. zh. Fizika, Abs. 9A177

AUTHORS: Zhiglinskiy, A. G.; Kochenirovskiy, A. S.; Putilin, E. S.

TITLE: Photoelectric photometer for measurement of weak hyperfine structure components

REF SOURCE: Tr. Kom. po Spektroskopii. AN SSSR, T. 2, vyp. 1, 1964, 595-604

TOPIC TAGS: photoelectric method, photometer, hyperfine structure, spectrophotometry

TRANSLATION: A recording photoelectric photometer is described, comprising a dc ratio meter with photomultipliers as pickups. The use of the signal-division principle in the photometer makes it possible, when using input circuits with large time constants, to determine the investigated intensity within a practically satisfactory time. The circuit is insensitive to changes in the light-source brightness. The photometer was tested in apparatus for the study of the hyperfine structure. Results of the investigation of the proposed scheme and its comparison with the single-channel scheme are presented.

SUB CODE: 20

Cord 1/1 Ast

25046-66

ACC NR: AR5018681 SOURCE CODE: UR/0196/65/000/007/V005/V005

AUTHOR: Zhiglinskiy, A.G.; Kochemirovskiy, A. S.; Putilin, E. S. 33

ORQ: none 8

TITLE: Photoelectric photometer for measuring weak spectroscopic (STS) components

SOURCE: Ref. zh. Elektrotehnika i energetika, Abs. 7V19

REF SOURCE: Tr. Komis. po spektroskopii. AN SSSR, vyp. 1, 1964, 595-604

TOPIC TAGS: ~~photoelectric photometer~~, photometry, photometer, photomultiplier, spectroscopy

TRANSLATION: A recording photoelectric photometer is proposed, which is a logometer of a direct current with photomultipliers as transmitters. The use in this photometer of the signal division principle makes it possible, with the help of large time constants of input circuits, to determine the intensity under study for a practically satisfactory period of time. The system is not sensitive to variations in the luminosity of the light source. The results of the research made on the proposed system and a comparison with a one-channel system are given. (From a resume)

SUB CODE: 20 SUBM DATE: none 2

Card 1/1 44

4 DC 1 636.247:621.383

L 33599-66 ENT(1)

ACC NR: AR6016205

SOURCE CODE: UR/0058/65/000/011/D036/D037

AUTHORS: Zhiglinskiy, A. G.; Kochemirovskiy, A. S.; Putilin, E. S.

45
B

TITLE: Vibrational spectrum of single-crystal Rochelle salt in polarization of light along three principal crystallographic directions at T = 293K and 20K

SOURCE: Ref. zh. Fizika, Abs. 11D282

REF SOURCE: Tr. Komis. po spektroskopii. AN SSSR, t. 3, vyp. 1, 1964, 595-603

TOPIC TAGS: absorption spectrum, light polarization, absorption band, potassium compound

ABSTRACT: The vibrational ²absorption spectrum of single-crystal Rochelle salt exhibits a strong variation with the temperature. This variation is manifest in a change of the intensity of the absorption bands and their shift, the appearance of new bands, and disappearance of old ones. A different behavior of polarized absorption bands is observed in different planes. [Translation of abstract]

SUB CODE: 20

Card 1/1

KOCHENDORFER, A., Prof.

Stress state in notched specimen and its significance for the rigidity
temperature of structural steel. Acta techn Hung 5/36:219-236 '61

1. Max-Planck-Institut for Eisenforschung, Dusseldorf.

KOCHEMKINA, A.S.; MEDVEDEVA, G.A.

Determination of sulfur in the form of sulfide in copper-zinc
lead concentrates and slags. Izv. vys. ucheb. zav., khim. i khim.
tekh. 7 no.5:863-865 '64 (MIRA 18:1)

1. Kafedra analiticheskoy khimii Ural'skogo politekhnicheskogo
instituta imeni S.M. Kirova.

KOCHENENKO, D.V.; USTINOV, A.N.; CHAUS, V.M.

Considerations on the use of the KKR-2 potato combine in 1954.
Sel'khozmaschina no.5:3-5 My '55. (MIRA 8:6)

(Potatoes-- Harvesting) (Combines (Agricultural machinery))

KUCHMENKO, D.V.; ZHITNEV, N.P.

Technological analysis of the process of harvesting potatoes by
machine. Sel'khozmaschina no.9:10-12 8 '57. (MLA 10:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sel'skokhozyay-
stvennogo mashinostroyeniya.

(Potatoes--Harvesting)

KOCHENKUNKO, D.V.

New agricultural machinery. Trakt. 1 sel'khozmasb. no.3:43-45
Mr '59. (MIRA 12:4)
(Agricultural machinery)

KOCHENENKO, D.V., kand.sel'skokhos.nauk; KLIMOVA, Ye.A., inzh.

~~_____~~
Sprayer for vineyards and orchards mounted on a small-size crawler
tractor. Zashch.rast.ot vred. i bol. 4 no.4:54 J1-Ag '59.

(MIRA 16:5)

(Spraying and dusting equipment)

KOCHENENKO, D.V.

Tillage implements and other agricultural machinery. Trakt. i
sel'khoz mash. no.5:37-40 My '59. (MIRA 12:6)
(Agricultural machinery)

KOCHENENKO, D.V.

KKP-18 hemp harvester. Trakt. i sel'khoz mash. 31 no.11:33-34
N 141. (MIRA 14:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sel'sk.
sel'skokhozyaystvennogo mashinostroyeniya.
(Hemp—Harvesting)

KOCHENENKO, D.V.; VOHOMOV, Yu.I.

Rotary separator for root crop harvesting machines. Trakt. i sel'khozmasb.
32 no.12:31-32 D '62. (MIRA 16:3)
(Root crops—Harvesting)

KOCHENENKO, D.V.

The FVP-A soil fumigation device. Trakt. 1 sel'khozmasb. 32 no.9:
32-33 S '62. (MIRA 15:12)
(Spraying and dusting equipment)

KOCHENENKO, D.V.

The ZhrB-4,9 high-speed windrow harvester. Trakt. 1
sel'khozmas. 33 no.3:35 M- '63. (MIRA 16:11)

KALAMIN, A.I., kand. sel'skokhoz. nauk; KOCHENENKO, L.V., kand. sel'skokhoz. nauk

Studying the working surfaces of potato sorting machines.
Trakt. i sel'khoz mash. 33 no.11:27-29 N '63.

(MIRA 1749)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sel'skokhozyaystvennogo mashinostroyeniya.

KOCHENENKO, D.V.

The MVM-250 mat weaving machine. Trakt. i sel'khoz mash. 33
no.11:39 N '63. (MIRA 17:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sel'skokho-
zyaystvennogo mashinostroyeniya.

KOCHENENKO, D.V.

The KSH-5B wide-range orchard cultivator. Trakt. i sel'khoz mash.
no.2337 F '65. (MIRA 1814)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sel'skokho-
zyaystvennogo mashinostroyeniya.

KOCHENENKO, D.V.

The KRM-5,6 tractor-driven cultivator and fertilizer spreader.
Trakt. i sel'khoz mash. no.11:33 N '64. (MIRA 18:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sel'skokhozyay-
stvennogo mashinostroyeniya.

RUSANOV, V.T.; GUR'YEV, I.D., master; KOCHENKOV, V.V., osmotrshchik-avtomatchik; SUKINOV, S.I., osmotrshchik-avtomatchik; SEMENIKHIN, N.A., osmotrshchik-prolazchik; MALYGINA, N.A., slesar'-avtomatchik; MANTAK, A.I., inzh.-tekhnolog; MALOV, G.A., instruktor; POTAPOV, A.L., mashinist elektrovoz; KOVRIZHKIN, N.P.; PATEYUK, I.L., starshiy inzh. po tormozam

Discussion of Boiko and Senderov's article "Is there a need for emergency braking boosters on freight trains?" Elek.i tepl. tiaga 5 no.12:26-27 D '61. (MIRA 15:1)

1. Punkt tekhnicheskogo osmotra stantsii Magnitogorsk Yuzhno-Ural'skoy dorogi.
2. Nachal'nik punkta tekhnicheskogo osmotra stantsii Magnitogorsk Yuzhno-Ural'skoy dorogi (for Rusanov).
3. Depo Tuapse Severo-Kavkazskoy dorogi (for Potapov).
4. Starshiy revisor sluzhby lokomotivnogo khozyaystva Moskovskoy dorogi (for Kovrishkin).
5. Sluzhba vagonnogo khozyaystva Moskovskoy dorogi (for Pateyuk).

(Railroads--Brakes)

KOVALEV, Ye.N., dotsent; KOCHENKOVA, A.V.; RUBTSOVA, V.R.

Effect of working conditions on the nervous system in workers of the Ryazan Combine of Artificial Fibers (1960-1962). Nauch. trudy Riaz.med.inst. 28:91-96 '63.

(MIRA 18:12)

1. Kafedra nervnykh bolezney (sav. kafedroy - dotsent Ye.N. Kovalev) Ryazanskogo meditsinskogo instituta imeni akademika I.P.Pavlova i oblastnaya bol'nitsa imeni Semashko (glavnyy vrach - B.N.Shirokov).

1 23728-66 EWT(m)/ETC(f)/EPF(n)-2/ENG(m) WY

ACC NR: AP6014806

SOURCE CODE: UR/0089/65/019/005/0463/0464

AUTHOR: Kochenov, A. J.; Lyashchenko, N. Ya.

ORG: none

TITLE: Comparison of the theoretical and experimental parameters for homogeneous uranium-water critical assembly

SOURCE: Atomnaya energiya, v. 19, no. 5, 1965, 463-464

TOPIC TAGS: uranium, polyethylene, neutron, transport equation, thermal neutron, neutron diffusion, nuclear reactor moderator, reactor fuel element

ABSTRACT: The P_1 approximation of the neutron transport equation and the single-velocity thermal-neutron diffusion equation were used for the calculations; the energy range was divided into 12 groups, including the thermal range for the slowing-down equation. The critical assembly used for the experimental determinations consisted of $70 \times 35 \times 250$ mm holders, with $250 \times 70 \times 2.7$ mm fuel sheets pressed from polyethylene and U_3O_8 with a ^{235}U content of 90%. Foils of Al, Cu, and stainless steel were used as covering. It was found that the assembly was quasi-homogeneous when the hydrogen and ^{235}U concentration ratio was $\rho H/\rho^{235}U \approx 50$. For a value of this ratio of about 50, the water gap between the foils amounted to about 5 mm, or equal to the mean free path of the thermal neutrons in water; therefore at >50 , the effect of the heterogeneity must be taken into account, and the method may be used only in the first case. For

Card 1/2

UDC: 621.039.520.22

L 23728-66

ACC NR: AP6014806

the calculation it was assumed that the assembly was spherical, with a 50-cm thick water reflector. Comparison of the results revealed agreement between theory and experiment. Thus, this method of calculation may be used for determining the critical dimensions of homogeneous, epithermal reactors using a hydrogenous moderator. In. D. Vornbiyev, V. B. Klimentov, V. M. Goryaev, and others carried out the experimental work. Orig. art. has: 1 figure. /RA/

SUB CODE: 18, 20 / EUM DATE: 15Jan65 / ORIG REF: 002

Card 2/2 /14/

L 28390-66 EPF(n)-2/ENT(m)/ETC(f)/ENG(m)

ACC NR: AP6001795

SOURCE CODE: UR/0089/65/019/006/0530/0531

AUTHOR: Kochenov, A. S.

ORG: None

32
B

TITLE: Thermal neutron flux attenuation caused by a hollow channel in reflector ¹⁹

SOURCE: Atomnaya energiya, v. 19, no. 6, 1965, 530-531

TOPIC TAG3: nuclear reactor, thermal neutron, neutron flux

ABSTRACT: An abbreviated version of the original paper is presented. Calculations of the thermal neutron flux in the center of a hollow cylindrical channel of radius R were based on an integral equation from which approximate formulas were derived. The distribution of neutron flux along the channel was expressed as $\Phi(x) = \Phi(0) \cdot e^{-x/L}$ where x is the distance from the channel bottom. It was assumed that the flux remained constant across the channel filled with reflecting material. The relative attenuation was determined by using the ratio $\Phi(0) = 1 + J$. Here, $\Phi(0)$ is the flux in the center of channel bottom $\Phi(0) = \frac{1}{2}$ while J is expressed by the formula $J = R/L \left\{ \frac{\pi}{2} [H_0(R/L) - N_0(R/L)] - 1 \right\}$. Here H_0 denotes Struve function and N_0 is Neumann function. In case of thin channels ($R/L \ll 1$) this formula was

Cord 1/2

UDC: 621.030.512.45

L 28390-00

ACC NR: AP6001795

replaced by the expression $J = 1 - R/L + \frac{1}{2} \left(\frac{2}{3} - C \right) (R/L)^2 + \frac{1}{3} (R/L)^3$, where Euler constant $C = 0.5772$. The values of J calculated for various ratio R/L were presented in a table. Orig. art. has: 1 table and 6 formulas. 0

SUB CODE: 18 / SUBM DATE: 19July65 / ORIG REF: 000 / OTH REF: 000

Card 2/2 CC

L 34366-66 ENT(m)/EWP(t)/ETI IJP(c) JD/JG

ACC NR: AT6008411

SOURCE CODE: UR/3136/65/000/957/0001/0032

AUTHOR: Aleksandrov, Yu. V.; Aleksenko, Yu. N.; Batalov, A. A.; Buynitskaya, V. I.; Kochenov, A. B.; Sarychev, M. A.

ORG: Institute of Atomic Energy im. I. V. Kurchatov (Institut atomnoy energii)

TITLE: The study of the influence of the porosity of beryllium reflector on the flow of thermal neutrons in horizontal beams

SOURCE: Moscow. Institut atomnoy energii. Doklady, IAE-957, 1965. Issledovaniye vliyaniya skvazhnosti berilliyevogo otrazhatelya na potok teplovykh netronov v gorizon tal'nykh puchkakh, 1-32

TOPIC TAGS: reactor reflector, neutron beam, neutron flux

ABSTRACT: The intensity of strong neutron fluxes (10^{10} – 10^{11} n/cm².sec) at the exit of experimental reactor beams is in part determined by the flow of thermal neutrons at the header of the beam and by its cross section. In turn, these depend on the properties of the reflector. Since the authors were unable to imitate on the critical stand the active zone with the required spectral composition of the neutrons, they imitated the "thermal" active zone by establishing the appropriate distribution of the thermal neutron flux within the beryllium reflector. This was achieved by placing a 0.5-mm thick cadmium filter between the active zone and the reflector. The present article describes the critical stand used and the methodology of the

Card 1/2

BLOKH, A.M.; KOCHENOV, A.V.; GINZBURG, A.I., glavnyy red.; APEL'TSIN, F.R., red.;
GRIGOR'YEV, V.M., red.; POLYAKOV, M.V., red.; RODIONOV, G.G., red.;
STEPANOV, I.S., red.; TROKHACHEV, P.A., red.; PAGUTOV, V.P., red.;
CHERNOSVITOV, Yu.L., red.; SHMANENKOV, I.V., red.; SHCHERBINA, V.V.,
red.; EYGELES, M.A., red.

[Impurity elements in bone phosphate of fossil fishes.] Elementy-
primesi v kostnom fosfate iskopaemykh ryb. Moskva, Nedra, 1964.
106 p. (Geologiya nestorozhdenii redkikh elementov, no.24).

(MIRA 19:1)

24.4300

AUTHOR:

Kochenev, I. S.

S/649/61/000/139/012/018
1028/1228

TITLE:

Flow in ducts with inflow or outflow through the wall

SOURCE:

Moscow. Institut inzhenerov zheleznodorozhnogo transporta. Trudy, no. 139. 1961.
Teoriya podobiya i yeye primeneniye v teplotekhnike; trudy pervoi mezhvuzrovakoy
konferentsii, 158-162

TEXT: Non-turbulent steady flow in a cylindrical pipe and a plane slit with smooth permeable walls, and solutions of this problem are known for the case $dG/dx = \text{const}$, (G = rate of flow). The paper considers the case of an arbitrary profile $dG/dx = f(x)$. The local coefficient of friction ζ is found to be independent of the profile of inflow or outflow, and to depend only on two local criteria: $\zeta = \zeta(Re, K_\perp)$, where $K_\perp = v_\perp(x)/w(x)$, v_\perp = velocity of the inflowing liquid (perpendicular to the wall), w = mean velocity of the flow. The analytical representation of ζ makes it possible to solve the equation, determining $\phi(x)$, for any inflow profile. Preliminary experiments have shown that these results can be extended to turbulent flows. Personalities mentioned as collaborators are: V. L. Romodanov, L. M. Parafilo, B. I. Nikolaev. English-language references read as follows: 1. Berman, A. S. J. Appl. Phys. 24: 9. September 1953; 2. Yuan, S. W., J. Appl. Phys. 27, 3. March 1956; 3. Yuan, S. W., and Finkelstein, A. B. Trans. ASME 78, 4 May 1956

ASSOCIATION: Institut atomnoy energii AN SSSR (Atomic Energy Institute, AS USSR)

Card 1/1

KOCHENOV, I.S.; VOINOV, N.L.; YEREMOVA, N.N.

Calculation and analysis of the parameters of the thermodynamic
cycle of an atomic power plant. Atom. energ. 13 no.1:38-46
J1 '62. (MIRA 15:7)

(Atomic power plants)

L 11859-66 ENT(1)/ENP(m)/EWA(d)/ETC(m)/EWA(1) NW/GS

ACC NR: AT6001359

SOURCE CODE: UR/0000/65/000/000/0131/0135

AUTHOR: Kochenov, I. B. (Moscow); Baranova, L. I. (Moscow); Vasil'yev, V. V. (Moscow)

ORG: None

TITLE: Flow in channels with porous walls

SOURCE: Teplo- i massopereenos. t. 1: Konvektivnyy teploobmen v odnorodnoy srede (Heat and mass transfer. v. 1: Convective heat exchange in an homogeneous medium). Minsk, nauka i tekhnika, 1965, 131-135

TOPIC TAGS: fluid flow, hydrodynamics, porosity, pressure, Reynolds number

ABSTRACT: The pressure change in a channel with porous walls is described by the equation of motion which, for a channel of constant cross section, when the velocity at the wall is perpendicular to the axis, can be written in the following averaged form:

$$dp = -\rho w^2 \left(\frac{dw}{w} + \frac{d(\beta G)}{\beta G} \right) - \xi \frac{\rho w^2}{2} \frac{dx}{d} \quad (1)$$

where

$$\xi = \frac{64}{\beta w^2} \quad \beta = \frac{1}{F} \int \left(\frac{u}{w} \right)^2 dF$$

Card 1/2

L 11859-66

ACC NR: AT6001359

It is evident from this equation that the pressure gradient is determined not only by the effect of friction at the wall, which is expressed by the second term on the right hand side of the equation, but also by the dynamic effect connected with transfer due to impulses between the main stream and the outflows, which is expressed by the first term on the right hand side which, with large outflows, plays a dominant role. Based on this concept, experiments were carried out in a channel with a diameter of 0.013 meters and a length of 0.1 meters. The section consisted of 270 discs with a thickness of 0.00025 meters and gaps (0.0001 meters) between the discs. The outflow from each section was isolated from the other sections and measurements were made of the pressure drop between sections. The experiments were made at rates corresponding to Reynolds numbers from 15,000 to 50,000. In all, about 300 experiments were made; two figures show a preliminary treatment of the results. Orig. art. has: 5 formulas and 4 tables.

SUB CODE: 20/ SUBM DATE: 31Aug65/ ORIG REF: 001/ OTH REF: 006

HW
Card 2/2.

L 11835-66 EWT(1)/EWP(m)/EWA(d)/PCS(k)/EWA(1) GS

ACC NR: AT6001374

SOURCE CODE: UR/0000/65/000/000/0306/0314

AUTHOR: Kochenov, I. S.; Kuznetsov, Yu. N.

ORG: None

TITLE: Unsteady-state flow in tubes

SOURCE: Teplo- i massopereenos. t. 1: Konvektivnyy teploobmen v odnorodnoy srede (Heat and mass transfer. v. 1: Convective heat exchange in an homogeneous medium). Minsk, Nauka i tekhnika, 1965, 306-314

TOPIC TAGS: hydrodynamics, fluid flow, unsteady flow, hydraulic resistance

ABSTRACT: The article starts with a theoretical discussion of the subject and a review of previous work in the field. Experimental determination of the coefficient of unsteady state friction resistance is difficult since the measuring apparatus and the equipment must be practically without inertia. The experiments in this case were carried out in two different experimental units with water and oil as the working substances. Pressure gradients were measured in three successive sections of a round tube with a diameter of 0.007 meters in the stabilized flow region. The measurements were made with an induction sensing device,

Card 1/2

L 11835-66

ACC NR: AT6001374

type DIF 1-M; and, a pressure drop of 20,000 newtons/meter² could be measured with an accuracy up to 0.5%. The experiments were carried out in a range of Reynolds numbers from 10^4 to 10^5 . In the experiments, great divergences from unity were observed in the value of the resistance coefficient, including negative values. In addition to the tests described above for determination of the unsteady state friction resistance, experiments were made to study local resistances in unsteady state flows; here also there were obtained divergences from unity of the coefficient of unsteady state local resistance. Thus, both theoretical and experimental investigations show that the coefficient of hydraulic resistance under strongly unsteady state conditions differs from its quasi steady state value, and that this fact must be taken into account in the calculation of processes which change rapidly with time. Orig. art. has: 21 formulas and 1 figure.

SUB CODE: 20/ SUBM DATE: 31Aug65/ ORIG REF: 006/ OTH REF: 002

HW)
Card 2/2

KOCHENOV, B.I.

Construction of building s with shallow foundations in the Central
Urals. Trudy NII prom.stan.i soor. no.4:32-35 '61. (MIRA 15:5)
(Foundations)

KOCHENGIN, B.I.; SHVETS, V.B.

Regional map of the normal seasonal freezing depths in clay
in the Ural Mountain region. Gen., fund. i mekh. grun. 4 no.3:28-29
'62. (MIRA 15:7)

(Ural Mountain region--Frozen ground)



SHVETI V.B., kand. tekhn. nauk; KOCHENGIN, B.I., inzh.; NAYZHEK, A.S., red.

[Instructions on determining the depth for laying foundations under conditions of ground freezing in the Ural Mountain Region] Ukazaniia po naznacheniiu glubiny zalozenia fundamentov iz uslovii promerzaniia gruntov na Urale. Sverdlovsk, 1964. 12 p. (MIRA 18:7)

1. Sverdlovsk. Ural'skiy promstroynii proyekt.

IL'ICHEVA, Ye.M.; KOCHENKOV, V.G.

Conference on the bioclimatology of man. Vop. kur., fizioter. i lech.
fis. kul't. 26 no.3:285-287 My-Je '61. (MIRA 14:7)
(CLIMATOLOGY, MEDICAL)

L 24214-65 EWT(a)/EPT(c)/EPT(a)-2/EPR Pr-4/Pa-4/Pu-4 DM

ACCESSION NR: AP5001207

8/0089/84/017/008/0482/0483 B

AUTHOR: Feynberg, S. M.; Dollezhal', N. A.; Vorob'yev, Ye. D.; Tsykanov, V. A.; Yemel'yanov, I. Ya.; Gryazev, V. M.; Kochenov, A. G.; Bulkin, Yu. M.; Ageyevkov, V. I.; AVer'yanov, P. G.

TITLE: Physical and exploitation characteristics of the SM-2 reactor /q

SOURCE: Atomnaya energiya, v. 17, no. 8, 1984, 452-463

TOPIC TAGS: research reactor, reactor/SM-2 reactor characteristic, nuclear reactor

ABSTRACT: The paper is a summary of the SSSR # 320 report at the International Conference on Peaceful Uses of Atomic Energy in Geneva, 1984. The reactor SM-2 was designed for a wide range of investigations in nuclear physics, solid state physics, metallurgy, radiation chemistry, physics and technology of nuclear reactor construction, and other fields of science and technology. The reactor was described in Atomnaya Energiya 8, 493 (1980). The thermal neutron flux is 2.8×10^{18} n/cm².sec at 80,000 kw. The fast neutron flux with energy larger

Card 1/2

L 24214-65

ACCESSION NR: AP9001387

than 1 Mev in the active zone exceeds 10^{15} n/cm². sec. Orig. art. has: 2 figures

ASSOCIATION: None

SUBMITTED: 00

ENCL: 00

SUB CODE: NP

NR REF SOV: 004

OTHER 000

Card 2/3

FEYNMAN, S.M.; KOLEZHAL', H.A.; VOROB'YEV, Ye.S.; TSYKANOV, V.A.;
YEMEL'YANOV, I. Ya.; GRYALEV, V.M.; KOCHENOV, A.S.; BULGIN, Ye.M.;
AGEYENKOV, V.I.; AVER'YANOV, S.G.

Physical and operational characteristics of the SV-2 reactor.
Atom. energ. 17 no.6:452 D 164 (MIRA 18:1)

L 10329-67 EWT(m) JR

ACC NR: AP6029796

SOURCE CODE: UR/0089/66/021/002/0097/0101

25
22

AUTHOR: Kochenov, A. S.

ORG: none

19
TITLE: Influence of the parameters of a research reactor on the thermal-neutron flux in the reflector and on the fuel cost

SOURCE: Atomnaya energiya, v. 21, no. 2, 1966, 97-101

TOPIC TAGS: reactor fuel element, thermal neutron, reactor neutron flux, reactor reflector, nuclear research reactor

ABSTRACT: With an aim at reducing the expenditures for fuel, which constitute a major fraction of reactor costs, the author considers means of improving reactor efficiency by increasing the neutron flux in the reflector. An analysis of the neutron-flux equation, made for a reactor with spherical active zone and infinite reflector, shows that the larger the neutron multiplication coefficient and the smaller the radius of the active zone, the higher the quality of the reactor (defined as the ratio of the maximum flux of thermal neutrons to the reactor power). In particular, this ratio turns out to be sufficiently large for reactors of the water-water type working with intermediate neutrons. Conditions under which the thermal-neutron flux at any point of the reactor can be increased by increasing the fuel concentration is derived. Cal-

Card 1/2

UDC: 621.039.572:621.039.537.621.039.54

L 10329-67

ACC NR: AP6029796

APPROVED FOR RELEASE: 09/18/2001

CIA-RDP86-00513R000723510001-2

culatation of the optimal burnup fraction shows that from the point of view of cost minimization neither very low nor very high fractions are desirable for research reactors, the optimum ranging from 20 to 40%. The authors thank S. M. Fainberg, P. Ya. Stepanov, and M. I. Laletin for a discussion of the problems considered. Orig. art. has: 2 figures, 23 formulas, and 2 tables.

SUB CODE: 18/ SUBM DATE: 08Feb66/ ORIG REF: 002/ OTH REF: 001

Card 2/2 BP

KOCHENOV, A.V.; SINOV'YEV, V.V.

Distribution of rare earth elements in the phosphate remains of
fishes from Maikop deposits. Geokhimiia no.8:714-725 '60.
(MIRA 14:1)

(Fishes, Fossil) (Phosphates)
(Rare earth metals)

BLOKH, A.M.; KOCHENOV, A.V.

Fluorine concentration in the bone remains of fossil fishes. Dokl.
AN SSSR 135 no.6:1495-1497 D '60. (NIRALJ:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo
syr'ya. Predstavleno akademikom N.M.Strakhovym.
(Fishes, Fossil) (Fluorine)

DROZDOVA, T.V.; KOCHENOV, A.V.

Organic matter in fossil fish bones. Geokhimiia no.8:748-751 '60.
(MIRA 14:1)

1. V.I. Vernadskiy Institute of Geochemistry and Analytical Chemistry,
Academy of Sciences, U.S.S.R., Moscow.
(Fishes, Fossil) (Organic matter)

KOCHENOV, A.V.; ZINOV'YEV, V.V.; KOVALEVA, S.A.

Some characteristics of the process of uranium accumulation in
peat bogs. Geokhimiya no.1:97-103 Ja '65.

(MIRA 1814)

SHCHERBINA, V.V.; NAUMOV, G.B.; MAKAROV, Ye.S.; GERASIMOVSKIY, V.I.;
YERMOLAYEV, N.P.; TARASOV, L.S.; TUGARINOV, A.I.; BARSUKOV,
Vik.L.; SOKOLOVA, N.T.; KOCHENOV, A.V.; GERMANOV, A.I.;
ZNAVENSKIY, Y.L., red. i sd-viz VINOGRADOV, A.P., akademik, red.;
POLYAKOVA, t.V., tekhn. red.

[Essential features of uranium geochemistry]: Osnovnye cherty
geokhimi urana. Pod red. A.P. Vinogradova. Moskva, Izd-vo
AN SSSR, 1963. 350 p. (MIRA 16:10)

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khimi.

(Uranium)

MSTISLAVSKIY, M.M.; KOCHENOV, A.V.

Conditions of accumulation of fish remains in Maikop sediments.
Izv. vyz. ucheb. zav.; geol. i razv. 4 no.3:3-15 Mr '61.

(MIRA 14:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo
syr'ya.

(Fishes, Fossil)

KOCHENOV, A.V.; BATURIN, G.N.; KOVALEVA, S.A.; YEMEL'YANOV, Ye.M.;
SHIMKUS, K.M.

Uranium and organic matter in the sediments of the Black and
Mediterranean Seas. Geokhimiia no.3:302-313 Mr '65. (MIRA 18:7)

L 14705-66 EWT(1)/EWT(m)/EPF(n)-2/ENP(t)/ENP(b) IJP(c) J1/W1/JG/GM
 ACC NR: AP6004394 (N) SOURCE CODE: UR/0020/56/166/003/0698/0700

AUTHOR: Baturin, G. N.; Kochenov, A. V.; Kovaleva, S. A.

ORG: none

TITLE: Some aspects of the distribution of uranium in Black Sea waters

SOURCE: AN SSSR. Doklady, v. 166, no. 3, 1966, 698-700

TOPIC TAGS: uranium, sea water, geochemistry, oceanography

ABSTRACT: During the 16th voyage of the scientific-research ship "Mikhail Lomonosov" in August-September 1964, the authors took 46 samples at various depths of the waters of the Black Sea at 16 different stations, including 15 samples of the bottom layer. According to the determinations, the uranium content of the Black Sea waters (except the bottom layer) ranges from $2 \cdot 10^{-6}$ to $4 \cdot 10^{-6}$ g/l, the average being 2.8×10^{-6} g/l. The uranium content of the bottom layer is much lower, frequently dropping to $n \times 10^{-7}$ g/l. This is attributed to the removal of uranium by adsorption on the sediments. One of the major factors in the adsorption of uranium by the sediments is thought to be the presence in the latter of organic matter whose parti-

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UDC: 551.464.679.1

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ACC NR: AP6004394

cles can occlude this metal while it is still precipitating in the mass of the water as a result of its reaction with hydrogen sulfide contaminating the water. The paper was presented by Academician N. M. Strakhov on 4 August 1965. Orig. art. has: 1 figure, 2 tables.

SUB CODE: 08/

SUBM DATE: 15Apr65/

ORIG REF: 006/

OTH REF: 002

Card 2/2 *SC*

37937

S/089/62/013/001/002/012
B102/B104

21.1000

AUTHORS: Kochenov, I. S., Voinov, M. L., Yershova, M. M.

TITLE: Calculation and analysis of the thermodynamic cycle in an atomic power plant

PERIODICAL: Atomnaya energiya, v. 13, no. 1, 1962, 38-46

TEXT: As existing methods of calculating the optimum reactor parameters for atomic power plants are still defective a new method has been developed as here described. The parameters and the absolute internal efficiency of the thermodynamic cycle of an atomic power plant which includes two coolant loops, a gas-cooled CO_2 reactor and two vapor-pressure stages in the second circuit, are calculated. The efficiency is determined as a function of the coolant temperature at the vapor generator inlet and outlet (T_1 , T_7), the temperature drops at the individual stages (Δ_j), the design of the regenerative preheater and the feed water temperature, the pressure in the condenser turbine, the humidity content of the vapor and the relative internal efficiency of the turbine unit. Relations for the

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Calculation and analysis of the...

S/089/62/013/001/002/012
B102/B104

the Institut atomnoy energii im. I. V. Kurchatova (Institute of Atomic Energy imeni I. V. Kurchatov). There are 9 figures.

SUBMITTED: December 6, 1961

Fig. 1: schematic drawing of the vapor generator

Legend: ΨH_3 -high-pressure circulation pump; ΨH_4 -low-pressure circulation pump

Fig. 2: temperature distribution in the vapor generator; T-coolant temperature, t - water or water vapor temperature ($^{\circ}C$)

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BRVAYS, A.V.; KOCHNEV, M.I., kandidat tekhnicheskikh nauk, redaktor;
IVANOV, A.G., kandidat tekhnicheskikh nauk, retsenzent; MATVEIEVA,
Ye.N., tekhnicheskii redaktor

[Adjustment and repair of projectors and optical measuring instruments] IUs tirevka i remont proektorov i opticheskikh dlinomerov. Moskva, Oos. nauchno-tekhn. i sd-vo mashinostreitel'noi lit-ry, 1951.
135 p. [Microfilm] (MIRA 9:3)
(Measuring instruments) (Optical instruments)

GORODETSKIY, I Ye.; KOCHENOV, M. I.

Machin Tools - Trade and Manufacture

Production tolerances and permissible measurement errors. Stan. i instr., 23, No. 2, 1952.

9. Monthly List of Russian Accessions, Library of Congress, June 1954, Uncl.

KOCHENOV, M.I. Kandidat tekhnicheskikh nauk.

Active control in machine building. [Isd] LOMITOMASH 25:108-
121 '52. (MLRA 8:2)
(Machinery industry)

KOCHENOV, M. I.

According to Izvestiya, Acad. Nauk SSSR (OTK) 12, (1888-91) 1953, the following was read at the seminar of the Laboratory of Machine and Instrument Precision, Institute of Machine Science, Academy of Sciences, USSR in 1952 and the first half of 1953.

M. I. Kochenov read a paper "Improving the precision of technical conditions in the manufacture of ball and roller bearings on automatic lines according to metrological specifications." The author remarked that it was necessary to define more accurately individual values ("state of the standard for ball and roller bearings and to introduce some new elements in the checking.

SO: ~~SECRET, CONFIDENTIAL, TOP SECRET~~. ~~CONFIDENTIAL~~.

KOCHENOV, M.I.; KHASKIN, I.N.

Electric contact measuring instruments with two floating contacts.
Izv.tekh.no.5:18-20 8-0 '56. (MLRA 10:2)
(Electric measurements) (Measuring instruments)

MANCHIN, Samariy Naumovich; SHATS, Adol'f Yevlevich; KOCHENOV, M.I.,
kandidat tekhnicheskikh nauk, rezensent; BAYZAL'YAN, R.D.,
inzhener, redaktor; BOGOMOLOVA, M.F., izdatel'skiy redaktor;
ZUBAKIN, I.M., tekhnicheskiy redaktor

[Measuring instruments and techniques of measurements] Izmeritel'nyi
instrument i tekhnika izmerenii. Moskva, Gos.izd-vo obr. promyshl..
1957. 198 p. (MLBA 10:15)
(Measuring instruments) (Machine-shop practice)

KOCHENOV, M.I.

VIKHEMAN, Viktor Semenovich, kandidat tekhnicheskikh nauk; PETROV, B.N.,
redaktor; KOCHENOV, M.I., kandidat tekhnicheskikh nauk, retsentsent;
MODUL', B.I. tekhnicheskii redaktor.

[Electronic automatic technical control of elements in machine
manufacture) Elektroavtomatika tekhnicheskogo kontrolya izdelii
mashinostroeniia. Moskva, Gos.nauchno-tekhn. izd-vo mashinostroit.
lit-ry, 1957. 303 p. (MIRA 10:5)

1. Oplen-korrespondent Akademii nauk SSSR (for Petrov).
(Automatic control)
(Machinery industry)

KOCHENOV, M.I.; FELIKS, A.Ya.

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no.1:71-74 Ja-F '57. (MIRA 10:4)
(Screw threads--Measurement)

KOCHENOV, M. $\frac{1}{2}$.

M. Y. Kochenov, "Investigation of Production Errors in the Automatic Production of Ball and Roller Bearings."

paper presented at the 2nd All-Union Conf. on Fundamental Problems in the Theory of Machines and Mechanisms, Moscow, USSR, 24-28 March 1978.

Yakovlev, A. I.
ERYAYS, Arkadiy Vladimirovich KYDINOV, V.Ya., kand.tekhn.nauk, retsenzent;
KOCHENOV, M.L., kand.tekhn.nauk, red.; SHIMSHURINA, Ye.A., red.
isd-va; SALAZKIN, N.P., tekhn.red.; VL'KIND, V.D., tekhn.red.

[Truing and repeiring of optical and mechanical measuring instruments]
IUsirovka i remont optiko-mekhanicheskikh ismeritel'nykh priborov.
Moskva, Gos.nauchno-tekhn.isd-vo mashinostroit.lit-ry. 1958. 458 p.
(MIRA 11:7)

(Measuring instruments--Maintenance and repair)